



OIPE

## RAW SEQUENCE LISTING

DATE: 01/30/2003

PATENT APPLICATION: US/10/058,597

TIME: 15:54:35

Input Set : N:\vernette\10058597.raw

Output Set: N:\CRF4\01292003\J058597.raw

3 <110> APPLICANT: Kapil, Sanjay  
 4 Shanmukhappa, Kumar  
 6 <120> TITLE OF INVENTION: IDENTIFICATION AND APPLICATIONS OF PORCINE REPRODUCTIVE AND  
 RESPIRATORY  
 7 SYNDROME VIRUS HOST SUSCEPTIBLE FACTOR(S) FOR IMPROVED SWINE BREEDING AND  
 8 DEVELOPMENT OF NON-SIMIAN RECOMBINANT CELL LINE FOR PROPAGATION OF THE VIRUS AND  
 9 A TARGET FOR A NOVEL CLASS OF ANTIVIRAL COMPOUNDS  
 11 <130> FILE REFERENCE: 30921-CIP1  
 C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/058,597  
 C--> 13 <141> CURRENT FILING DATE: 2003-01-22  
 13 <150> PRIOR APPLICATION NUMBER: 09/772,044  
 14 <151> PRIOR FILING DATE: 2001-01-29  
 16 <160> NUMBER OF SEQ ID NOS: 38  
 18 <170> SOFTWARE: PatentIn version 3.1  
 20 <210> SEQ ID NO: 1  
 21 <211> LENGTH: 1465  
 22 <212> TYPE: DNA  
 23 <213> ORGANISM: Simian Gen. Sp.  
 25 <220> FEATURE:  
 26 <221> NAME/KEY: misc\_feature  
 27 <222> LOCATION: (451)..(451)  
 28 <223> OTHER INFORMATION: n is a, c, g or t  
 31 <220> FEATURE:  
 32 <221> NAME/KEY: misc\_feature  
 33 <222> LOCATION: (484)..(484)  
 34 <223> OTHER INFORMATION: n is a, c, g or t  
 37 <220> FEATURE:  
 38 <221> NAME/KEY: misc\_feature  
 39 <222> LOCATION: (556)..(556)  
 40 <223> OTHER INFORMATION: n is a, c, g or t  
 43 <220> FEATURE:  
 44 <221> NAME/KEY: misc\_feature  
 45 <222> LOCATION: (616)..(616)  
 46 <223> OTHER INFORMATION: n is a, c, g or t  
 49 <220> FEATURE:  
 50 <221> NAME/KEY: misc\_feature  
 51 <222> LOCATION: (645)..(645)  
 52 <223> OTHER INFORMATION: n is a, c, g or t  
 55 <220> FEATURE:  
 56 <221> NAME/KEY: misc\_feature  
 57 <222> LOCATION: (649)..(649)  
 58 <223> OTHER INFORMATION: n is a, c, g or t  
 61 <220> FEATURE:  
 62 <221> NAME/KEY: misc\_feature

ENTERED

## RAW SEQUENCE LISTING

DATE: 01/30/2003

PATENT APPLICATION: US/10/058,597

TIME: 15:54:35

Input Set : N:\vernette\10058597.raw

Output Set: N:\CRF4\01292003\J058597.raw

```

63 <222> LOCATION: (652)..(652)
64 <223> OTHER INFORMATION: n is a, c, g or t
67 <220> FEATURE:
68 <221> NAME/KEY: misc_feature
69 <222> LOCATION: (655)..(655)
70 <223> OTHER INFORMATION: n is a, c, g or t
73 <220> FEATURE:
74 <221> NAME/KEY: misc_feature
75 <222> LOCATION: (884)..(884)
76 <223> OTHER INFORMATION: n is a, c, g or t
79 <220> FEATURE:
80 <221> NAME/KEY: misc_feature
81 <222> LOCATION: (903)..(903)
82 <223> OTHER INFORMATION: n is a, c, g or t
85 <220> FEATURE:
86 <221> NAME/KEY: misc_feature
87 <222> LOCATION: (917)..(917)
88 <223> OTHER INFORMATION: n is a, c, g or t
91 <220> FEATURE:
92 <221> NAME/KEY: misc_feature
93 <222> LOCATION: (1193)..(1193)
94 <223> OTHER INFORMATION: n is a, c, g or t
97 <400> SEQUENCE: 1
98 gtccccgact cgcacgagtg gtagccccag gatgggtgag tttaacgaga agaagacaac 60
100 atgtggcacc gtttgccctca agtacctgct gtttacctac aactgctgct tctggctggc 120
102 cggcctggct gtcattggcag tgggcatctg gacgctggcc ctcaagagtg actacatcag 180
104 cctcctggcc tcgggcacct acctggccac agcctacatc ctggtggtgg cgggcgctgt 240
106 cgtcatggtg accggggtct tgggctgctg tgccaccttc aaggagcgct ggaacctgct 300
108 gcgcctgtac ttcatcctgc tcctcatcat ctttctgctg gagatcatcg ctggtgtcct 360
110 cgcctatgtc tactaccagc agctgaacac agagctcaag gagaacctta aggacacccat 420
W--> 112 ggccaagcgc taccaccagc cgggtcaoga ngcctgagc agcgtgtgga accaactgca 480
W--> 114 gcangagttc cactgctgtg gcagcaacaa ctcacaggac tggcgggaca gtgaagtgga 540
W--> 116 tccgcttaag ggaagnccgt ggcccggtgg tccccgatag ctgcttgcaa gacggtggtg 600
W--> 118 gctggttgtg ggcaancggg accacgcctt caacatttac aaggnggang gnggnttcat 660
120 caccaagttg gagaccttca tccaggagca cctcagggtc attggggctg tggggactgg 720
122 cattgcctgt gtgcaggtct ttggcatgat cttcacatgc tgcctgtaca ggagcctcaa 780
124 gctggagcac tactgacctt gccctgggct tggccgcggc tctgtgcttt gctgctgctg 840
W--> 126 caccacaacta ctgagctgag accactgagt accaggggct gggntccctg atgacaccca 900
W--> 128 ccntgtgcca tcaccanaac tttggggacc ccaaccccag aggcaagctt caagtgcctt 960
130 tcgctgcaca ccaaagccca gcagggaagt gaggggggct ggcgggacga cggtatgggg 1020
132 gtgtttttgtg gggctgctg aacacattct gcctggtggt cagatgcagg ctagccgggg 1080
134 ccttgtgtgag tagggcaagg ccgagtgttc ccagcagggg gagaagccct tcacatccca 1140
W--> 136 ggcccttcag ggattagggc tttgccttgc agccacatgg ccccatccca gtntgagaag 1200
138 ctgagtaagc tctgacctt gggcctgggc ctctgccct cccaccccag gcctcgtctc 1260
140 cctcagagcc cctgctgtct tccccaccgc agtcaccacc acccgaaatg ccacatggtc 1320
142 acttgtgcac tgccccgtcc atgtgcctgt gtggggcagg ggccctcccg tttgtttcac 1380
144 tgctgtaccc agatgcctac aaccatccct gccacatata ggtgctcaat aaacacttgt 1440
146 ggggcagatg gacgaaaaaa aaaaa 1465
149 <210> SEQ ID NO: 2

```

## RAW SEQUENCE LISTING

DATE: 01/30/2003

PATENT APPLICATION: US/10/058,597

TIME: 15:54:35

Input Set : N:\vernette\10058597.raw

Output Set: N:\CRF4\01292003\J058597.raw

```

150 <211> LENGTH: 21
151 <212> TYPE: DNA
152 <213> ORGANISM: Simian Gen. Sp.
154 <400> SEQUENCE: 2
155 agcctcctca ggaattctgt c 21
158 <210> SEQ ID NO: 3
159 <211> LENGTH: 20
160 <212> TYPE: DNA
161 <213> ORGANISM: Simian Gen. Sp.
163 <400> SEQUENCE: 3
164 gaagcagcag ttgaaggtga 20
167 <210> SEQ ID NO: 4
168 <211> LENGTH: 22
169 <212> TYPE: DNA
170 <213> ORGANISM: Simian Gen. Sp.
172 <400> SEQUENCE: 4
173 tttcaccttc aactgctgct tc 22
176 <210> SEQ ID NO: 5
177 <211> LENGTH: 19
178 <212> TYPE: DNA
179 <213> ORGANISM: Simian Gen. Sp.
181 <400> SEQUENCE: 5
182 gctgatgtag tcgctcttg 19
185 <210> SEQ ID NO: 6
186 <211> LENGTH: 21
187 <212> TYPE: DNA
188 <213> ORGANISM: Simian Gen. Sp.
190 <400> SEQUENCE: 6
191 gccacagcct acatcctagt g 21
194 <210> SEQ ID NO: 7
195 <211> LENGTH: 21
196 <212> TYPE: DNA
197 <213> ORGANISM: Simian Gen. Sp.
199 <400> SEQUENCE: 7
200 agtagacgta ggccaggact c 21
203 <210> SEQ ID NO: 8
204 <211> LENGTH: 21
205 <212> TYPE: DNA
206 <213> ORGANISM: Simian Gen. Sp.
208 <400> SEQUENCE: 8
209 agtagacgta ggccaggact c 21
212 <210> SEQ ID NO: 9
213 <211> LENGTH: 22
214 <212> TYPE: DNA
215 <213> ORGANISM: Simian Gen. Sp.
217 <400> SEQUENCE: 9
218 ctcagagtgt cctccagggtt cg 22
221 <210> SEQ ID NO: 10
222 <211> LENGTH: 20

```

## RAW SEQUENCE LISTING

DATE: 01/30/2003

PATENT APPLICATION: US/10/058,597

TIME: 15:54:35

Input Set : N:\vernette\10058597.raw

Output Set: N:\CRF4\01292003\J058597.raw

```

223 <212> TYPE: DNA
224 <213> ORGANISM: Simian Gen. Sp.
226 <400> SEQUENCE: 10
227 tcaaggcgaa cctgaaggac 20
230 <210> SEQ ID NO: 11
231 <211> LENGTH: 20
232 <212> TYPE: DNA
233 <213> ORGANISM: Simian Gen. Sp.
235 <400> SEQUENCE: 11
236 tgtagatggt ggaggcgtgg 20
239 <210> SEQ ID NO: 12
240 <211> LENGTH: 19
241 <212> TYPE: DNA
242 <213> ORGANISM: Simian Gen. Sp.
244 <400> SEQUENCE: 12
245 ctgtggcagc aacaactcc 19
248 <210> SEQ ID NO: 13
249 <211> LENGTH: 20
250 <212> TYPE: DNA
251 <213> ORGANISM: Simian Gen. Sp.
253 <400> SEQUENCE: 13
254 ctccagcttc aggtcttgt 20
257 <210> SEQ ID NO: 14
258 <211> LENGTH: 3161
259 <212> TYPE: DNA
260 <213> ORGANISM: Simian Gen. Sp.
262 <400> SEQUENCE: 14
263 cgccgccact gccggcctcg gacgcgtgga cgagcctcct caggaattct gtccacctgt 60
265 ctccagagagg agcgggtccc agcagccagg tgagtgtgtg ggggggcccg gtgaaagtcc 120
267 accttggggc ggtactgtct gaaagcgtgg cccaggtgc tgagcggggc ctgggccgca 180
269 ctgccccctg tccctcaggg tggacacccc aggacagagc gagcggggca cctctggggg 240
271 gtccctgggg aggagcagag cccgcggcgg tgtttctccc tggggtttgt gtggctgtcc 300
273 tcaccggtaa tgaggaccag cacgggaagg ccccccaggc ctgccaccgc ccgcacctgg 360
275 ggtggggggg aaggaaggca ggctgccct tgaacggaag cctgaggggc ctcccggagg 420
277 cccaggacta ggctcgagag ggcagcacag cctgtctgtg agtggccttc tccccctccc 480
279 ctccagcagc cgctagggtc ctgccagcct gtgacgtggg gccgggggaa tgcttggggg 540
281 ggggtgggga agccttgcat agctcacccc gaaggtgcct gctggggctt cctaccctgg 600
283 ctgccggcag ggtgagtcag cgggtgacgg ctgggggtcc tccacgcccc cctcacggcc 660
285 cggggctctg ggcagagaag ctggcctggg ggcagtgggc cctccctccc ttactggtac 720
287 tgggatggg ggctcctgag ctgcgtccc aggaagtgtc ccccttccca cggacactcc 780
289 cagagccttc accagccaac tgggactggt ctggatgtct gtgtccctc cttctgtccc 840
291 cactggcatc cccagggcgc gccctcccct gttccctgcc ccagccccag gatgggcgaa 900
293 ttcggcgaga agggcgcgcc atgcggccac cgtttgcctc aagtacctgc ttttcacctt 960
295 caactgctgc ttctgggtga ggagtgggccc ccgcttccc gagcccgggg ctccagccgt 1020
297 ctctcacacc cgggccagac gtggtgattg gtgtgactg cccgcagctg gctggcctgg 1080
299 ccgtcatggc agtgggcacg tggacgtgg ccctcaagag cgactacatc agcctcctgg 1140
301 cctcgggcac ctacctggcc acagcctaca tctagtggg ggcgggcatt gttgtcatgg 1200
303 tgaccggtgt tctgggctgc tgtgccacct tcaaggagcg gaggaacctg ctgcggctgt 1260
305 atttcacct gctgctgtgc atctttctgc tggagatcat cgccggagtc ctggcctacg 1320

```

## RAW SEQUENCE LISTING

DATE: 01/30/2003

PATENT APPLICATION: US/10/058,597

TIME: 15:54:35

Input Set : N:\vernette\10058597.raw

Output Set: N:\CRF4\01292003\J058597.raw

```

307 tctactacca gcaggtgccc ggctggggcg ggccgcaggg gcgcgtacac gcacaggggtg 1380
309 tgcacgcgca tgagcacgga cagcacgtg ccctgggaag gaagagatgc acacaggcag 1440
311 ggacacgtgc acgcgacccc acaggttcca tgctgaccgt cgtgtcgtca ggccctggag 1500
313 gtgggaccgt gtcaccaggg aggaccccca caggggtggc cagtctgcct gcagcaccca 1560
315 accacccacc tgggggcccc agtgtgccct ccctgcccc gacccccac cccatgccat 1620
317 ctgggtgacg ttcccgggca cctgaccac cccaggcagc gtctgtctcc agacctgttt 1680
319 ggcaccttct gcgctctctc cgtctgtgcc catccccgcg ctgcccctct ccccgcttct 1740
321 tagtctttgt ggctgaagct gtcgccacct cgccacagct gagtgcagag ctcaaggcga 1800
323 acctgaagga cactctgagc aagcgctacc gccagccggg ccacgagggt gtgaccagcg 1860
325 ccacggataa gctgcagcag gaggtcggtg ggtggcgccg ggcgggctct cccctgacgt 1920
327 ctgtcggagc cctggctgct gcgggggttg tggggagggg acggggctca gcccgggcca 1980
329 tgttcccgtg cagttccact gctgtggcag caacaactcc caggactggc gggacagtga 2040
331 gtggatcctc tcgggtgagg caggcgaccg tgtggttctt gacagctgct gcaagacggg 2100
333 ggtggcgggc tgccggcggc gggaccacgc ctccaacatc taaaagtgg aggtaggcca 2160
335 gtgggggctg caccgggat gctggaggcg ggtgtcccc caccgaggg gcccggggct 2220
337 ggggaagagg cccccctgc cctcgacgcg ccgtcacccc ccactccac cccagggcgg 2280
339 ctgcatcacc aggtctggaga ccttcatccg ggagcacctg aggatcatcg gggctgtggg 2340
341 catcgcatc gcctgtgtgc aggtgcgggc gggggcgccg gcgggcgcgg ggcacggggc 2400
343 ggcattggca caggcgctg ctcatgccg ctcttggtc aggtgttcgg catgatcttc 2460
345 acgtgctgcc tgtacaagag cctgaagctg gagcactact gacctgcca cggacctggg 2520
347 cccacgcctg caccgcagct tctcaggatg cgctgactac tgacggctag gggctgcggg 2580
349 cccaggacgc ggctcctccc ctcccacact gccagggagg tgggtgcctc atgccagggc 2640
351 ccacgaccgt gccatcaccc cgactcctgg ggaccgcaa ccccagaggg agcttcaagt 2700
353 gcctttcgct gccaccaaag tcccacggcc cagcccggtc cctcctgct ctgggggtgg 2760
355 tggggcttga gctcaaaccg taaaggcccc atgcccgctg cctctcctt tgggggtattg 2820
357 ttccctgata acctggctcc gtcacggggc tggctgtgac caggttaggc ggaagctggc 2880
359 cagcccgggg ccagtgcccag gcggcaggca gcaggtgagg aagccgggtg cctgcctgct 2940
361 ccaggaagag caagagccct cccggcctgg cctctgcgcc cacttacctg ctgctccac 3000
363 caccatctaa aggccagggt ggacggccac atgctgacgc cctccgggg cagggcagcc 3060
365 ctctgggct ccttcaactg tgtatcccca tgcctaggac tgctcctgct ttgtgatagg 3120
367 tgctcaataa acgctgtggt accagaaaaa aaaaaaaaaa a 3161
370 <210> SEQ ID NO: 15
371 <211> LENGTH: 89
372 <212> TYPE: DNA
373 <213> ORGANISM: Simian Gen. Sp.
375 <400> SEQUENCE: 15
376 cgcggccact gccggcctcg gacgcgtgga cgagcctcct caggaattct gtccacctgt 60
378 ctacagagagg agcgggtccc agcagccag 89
381 <210> SEQ ID NO: 16
382 <211> LENGTH: 795
383 <212> TYPE: DNA
384 <213> ORGANISM: Simian Gen. Sp.
386 <400> SEQUENCE: 16
387 gtgagtgctg ggcggggccg ggtgaaagtc caccttgggg cggtactgtc tgaaagcgtg 60
389 gccccagggtg ctgagcgggg cctgggccgc actgcccct gtccctcagg gtggacaccc 120
391 caggacagag cgagcggggc acctctgggg tgtccctggg gaggagcaga gcccgcggcg 180
393 gtgtttctcc ctgggggttg tgtggctgtc ctaccggta atgaggacca gcacgggaag 240
395 gccccccagg cctgccaccc gcccgccctg ggggtggggg gaaggaaggc aggcctgcc 300
397 ttgaacggaa gcctgagggg cctcccgag gcccaggact aggctcgaga gggcagcaca 360

```

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/058,597

DATE: 01/30/2003  
TIME: 15:54:36

Input Set : N:\vernette\10058597.raw  
Output Set: N:\CRF4\01292003\J058597.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 451, 484, 556, 616, 645, 649, 652, 655, 884, 903, 917, 1193  
Seq#:37; Xaa Pos. 2, 3

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 8